

Indiana Department of Transportation

Certified Technician Program

Operational Guidelines
Revision July 1, 2001



CERTIFIED TECHNICIAN PROGRAM

OPERATIONAL GUIDELINES

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These policies and procedures have been developed by the Indiana Department of Transportation, Division of Human Resources, in conjunction with the Construction and Testing Technical Panels.

These guidelines become effective July 1, 2001 and supercede all other guidelines.

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PROGRAM OVERVIEW AND GOALS

OVERVIEW

The Certified Technician Program is competency or performance based training. This training includes classroom instruction, field experience and practical laboratory training. The Indiana Department of Transportation intends to develop employees to qualify as certified construction inspectors or certified testing technicians. The program includes cross training in all job competencies of construction or testing inspection. Cross training enables technicians to handle greater responsibility with less supervision. When fully trained, technicians should be competent in their knowledge and ability to perform inspections on projects. The program prepares technicians for project supervision and possible advancement into management.

After successfully completing this three-year program, participants become either, "Certified Construction Technicians," or "Certified Testing Technicians."

GOALS

1. Cross train technicians working in similar functional areas, in all facets of the inspection process and job requirements. Develop these technicians into more efficient "Universal" technicians.
2. Provide continuing education for technician employees to update them on current and future technological advancements.
3. Increase productivity, while maintaining the current workforce.
4. Decrease the supervision of technicians by pursuing QC/QA Procedures.
5. Provide a career path and advancement opportunity for technical employees.
6. Standardize construction and testing operations throughout the State of Indiana.

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PROMOTION GUIDELINES AND PROCEDURES

The Certified Technician Program is intended to be a three-year career path. Employees obtain necessary knowledge during the training portion of each year. Each year employees should master two primary aspects of their function. The individual demonstrates the development of skill and knowledge through practical application and performance on exams. The employee progresses in the following manner:

New hires enter the program at the HEA IV level. The new hire is promoted after passing two (2) courses on or after their next anniversary date. Promotion includes a 9% pay increase and upgrade to HEA III level.

Participants in the Certified Technician Program are promoted to the EA II level after passing four (4) courses on or after their next anniversary date. Promotion to EA II includes a 9% pay increase.

Participants are promoted to the EA I level after passing all six (6) courses on or after their next anniversary date. Promotion to EA I includes a 9% pay increase.

Existing employees that transfer into the Certified Technician Program will be promoted after successfully passing 2 courses. The 9% pay increase will be effective on or after their anniversary date of their transfer.

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PROGRAM STRUCTURE

The Certified Technician Program consists of two separate training tracks: Construction Inspection and Testing Inspection. The two tracks consist of the following training courses:

Construction Technician Track:

1st Year

Hot Mix Asphalt (HMA) (Construction)	Bridge Construction and Deck Repair
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2nd Year

Concrete Paving (Construction)	Construction Procedures Part I
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3rd Year

Earthwork/Soils (Construction)	Construction Procedures Part II
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Testing Technician Track:

1st Year

Hot Mix Asphalt (HMA) (Testing)	Special Procedures and Tests - Part 1
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2nd Year

Concrete Paving (Testing)	Aggregates Testing (CAPP)
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3rd Year

Earthworks/Soils (Testing)	Special Procedures and Tests - Part 2
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Additional areas of study may be taken to evaluate or enhance basic job skills. These areas are not required for completion of the Certified Technician Program.

Basic Mathematics

Highway Plan Reading

Bridge Plan Reading

Employees may be placed in the program at any point. Each year is a unit and is not dependent on the previous year.

An additional class may be offered to include contract administration, computer usage, management, and other related areas. The purpose of this class is to provide a further opportunity for advancement when supervisory openings are available. There are no monetary adjustments for just completing the

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additional class.

CERTIFIED TECHNICIAN PANEL

The Certified Technician Panel members represent management and operations. Panel members serve as subject matter experts and procedure experts. Panel members are responsible for:

1. Assisting in the development of course curriculum and support materials.
2. Recommending program parameters and guidelines.
3. Recommending administrative and functional details.
4. Providing input into the structure of the reclassification of related positions.
5. Revising course curriculum and support materials.
6. Recommending amendments to the "Operational Guidelines," as needed.
7. Providing district management with current information about the Certified Technician Program.
8. Promoting the benefits and the organizational impact of the Certified Technician Program.

GLOSSARY OF TERMS

1. **Anniversary Date**- Date of hire or date of transfer into the Certified Technician Program.
2. **Certified Technician Panel**- Shall consist of the Program Coordinator, a representative from Construction & Testing from each district, Division Chief and Field Engineer of Contracts & Construction, Division Chief of Materials & Tests and the Chief Engineer.
3. **District Liaison**-The DCE or DMTE or their appointed representative.
4. **District Review Panel**- Shall consist of the District Director, the District Materials & Test Engineer (DMTE) and the District Construction Engineer (DCE).
5. **Exam Administrator**- Shall be appointed by the DMTE or the DCE.
6. **EA**- Engineer Assistant
7. **HEA**- Highway Engineer Assistant
8. **Program Coordinator**- A representative appointed by the Human Resources Division to

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oversee the Certified Technician Program.

EXAMINATION GUIDELINES

Administration of Certified Technician Exams

Administration of examination guidelines is the responsibility of the Program Coordinator. At the districts, the DCE and DMTE appoint Exam Administrators.

The district must request copies of exams from the Program Coordinator. Districts must provide the Human Resources Division with a schedule of exam dates, with reasonable notice prior to the exam date, or retake date.

The Program Coordinator records the number of exams sent, the date sent and the district. The Program Coordinator sends exams to the District Construction Liaison or the District Testing Liaison, prior to the exam date. The liaison will secure the exam copies until delivery to the Exam Administrator.

Exam Administrators must verify the number of exams and administer the exam at the training location. After the exam, the Administrator collects all exams from trainees. The Administrator verifies that identification information is complete on each exam and initials each exam. The administrator returns all exams to the District Liaison. The District Liaison places all exams, used and unused, in a sealed envelope or container. All exams should be delivered to:

**Certified Technician Program Coordinator
Division of Human Resources
Indiana Government Center North, Room N750**

The Exam Administrator must complete a verification sheet, indicating the handling of exam documents. The Program Coordinator must document the receipt of exams when received back in Central Office.

Unless authorized by the Program Coordinator, copying of exams is prohibited and subject to appropriate disciplinary action.

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Exam Facility

The District Liaison makes sure that the room is large enough to allow separation between trainees taking exams. The Exam Administrator or proctor must remain in the room with the trainees at all times.

Scoring

The Program Coordinator or designated neutral party grades all exams. All scores for each individual and each exam are recorded in the Division of Human Resources computerized training files. The Program Coordinator sends a list of exam participants and scores to the District Administrative Manager as the official announcement. The District Administrative Manager must keep written documentation on file for District records. The District communicates scores to each trainee. The actual exam, stored in the Division of Human Resources archives files, is the official documentation. Exams remain on file for 5 years.

Testing

Testing shall consist of an "Initial" exam and a "Retake" exam if necessary. If an exam is designated as an "Open Book" exam, the class manual and other INDOT Specifications material may be used to answer questions. Notes written in bound notebooks can be used. No notes written on loose sheets of paper can be used during the exam. **There should be no note sharing or talking between trainees during the exam.**

Passing Score

To "Pass," or meet the course requirements, the trainee must achieve a score of 70% (percent) or higher on the first exam or the retake.

Retake Exams

Retake exams may not be taken within four (4) weeks of the first exam and must be completed within eight (8) weeks. The District should schedule the retake exam and inform employees of the date for the retake. Employees should wait a minimum of one (1) week after reviewing an exam before retaking it.

Course Failure

A participant receives a course failure after achieving a non-passing score on the first exam attempt and the retake exam. An employee that has a course failure is required to study on their own and retest in that same course prior to November 20th of the same calendar year. Failure of the second initial and second retake exam is considered a second course failure and will result in Program Release Options.

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Exam Review Policies

Any trainee may ask to review their exams after the exam has been graded. One review is allowed per exam. The review is allowed within 30 days after the employee is notified of exam results.

After receiving exam results, the District Liaison determines which trainees have requested to review their exams, sets a review date, sends the list of names to the Program Coordinator, and appoints the Review Administrator.

The review session is limited to 20 minutes. The trainee may not bring any books, paper or writing instruments into the review room. The trainee may not ask questions, take notes, or make any marks on the exam pages.

Trainees may tell the Review Administrator about any questions they wish to challenge. The trainee must provide the question number and a brief explanation of their challenge. The Review Administrator will keep a record of questions challenged and pass this information to the Program Coordinator.

At the completion of the review, the administrator will provide a pen and have each trainee date and sign the label on the front of the exam. All exams are placed in a sealed envelope and returned to the Program Coordinator.

The Program Coordinator will determine the validity of challenges to questions.

Make-up Exams

If a trainee is unable to take the final exam at the scheduled time/date, a make-up exam may be scheduled. The District Construction Engineer or the District Testing Engineer will set the date for a make-up exam as close to the original test date as possible. The Program Coordinator will be notified of the make-up exam date. All make-up exams must be returned to the Program Coordinator in a sealed container or envelope.

Continuing Education

Upon completion of the Certified Technician Program, employees will be required to remain current with the most recent changes to INDOT standards and specifications in addition to meeting requirements specified under the Qualified Technician Program.

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Cross Training Between Construction and Testing

The District Director may authorize cross training of EA1's between Construction and Testing. Employees seeking cross training must be fully certified in one field. Employees participating in cross training are not eligible for additional promotions or raises.

Employee Entrance into the Program

All policies and guidelines contained in this document apply to entrance employees for Testing and Construction Technicians. The Certified Technician Program is open to any INDOT employee. Only employees listed in Certified Technician staffing positions may receive promotions for completing courses.

PROGRESSION THROUGH THE PROGRAM

The Certified Technician Program consists of three (3) training years. Normal progress through the Certified Technician Program includes meeting two (2) requirements in each training year. First, the participant must pass two (2) courses. Second, the participant must work one (1) year past their anniversary date.

A participant that meets both requirements during one (1) training year is automatically eligible to progress to the next training year.

A participant that FAILS TWO (2) training courses, at any time, should be released from the Certified Technician Program. (Failure of two (2) courses includes failing two (2) separate courses or failing one (1) course two (2) times.)

Temporary Eligibility Status

A participant that FAILS ONE(1) course during the training year but meets the other requirements enters "temporary eligibility" status until November 20th of the same calendar year. Temporary eligibility can extend beyond November 20th with approval by the District Review Panel for extenuating circumstances such as medical leave.

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Examples of Progression through the Certified Technician Program are described below.

1. John Black entered the training program and passed two (2) courses during the training year.

John Black is eligible to continue in the program.

2. Bill Smith entered the training program and failed two (2) courses during the training year.

Bill Smith is removed from the training program. (See Program Release Options)

3. Joe Jones entered the training program and passed one (1) course but failed the other course that year.

Joe Jones is put on “temporary eligibility” status. (See “Temporary Eligibility” status retaking of course requirements in Progression Through the Program section)

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PROGRAM RELEASE OPTIONS

There are three (3) options for employees leaving the Certified Technician Program.

The District Director and Human Resources personnel review situations when individuals do not meet the program requirements. The District Director and Human Resources personnel determine which option to select to release the program participant.

1. The employee is allowed to leave the Certified Technician Program voluntarily after accepting another position outside the parameters of the Certified Technician Program.
2. When a position is available, INDOT may reassign the employee to a new position. This position may be at a lower classification than the Certified Technician position.
3. The third option is termination of employment with INDOT, according to Article 22 of the Unity/State Of Indiana Settlement. INDOT will make every effort to resolve release issues using options 1 or 2 where possible.

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PROGRAM REINSTATEMENT POLICIES

Only in special circumstances can participants in the Certified Technician Program be reinstated in the program after leaving. The District Director must approve all instances when employees are reinstated in the Certified Technician Program.

Employees that leave INDOT voluntarily may be rehired. The returning employee's classification level will be decided by the District Review Panel. When rehiring a former employee, management must follow INDOT's normal hiring policies.

Employees that leave the Certified Technician Program voluntarily, but do not leave INDOT, may re-enter the program. The employee's classification level will be decided by the District Review Panel.

District Directors have authority to reinstate employees in the Certified Technician Program. Employees who fail to meet Certified Technician Program requirements, and are released from the program, may be reinstated at the direction of the District Director. There is no waiting period before reinstatement. Upon reinstatement, the employee must follow normal progression through the program.

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PROGRAM COORDINATOR'S ROLE

The Program Coordinator of the Certified Technician Program is an INDOT training officer in Human Resources. The Coordinator has the following duties:

1. Gather information about District Training plans, prior to the start of each training year.
2. Assist in the distribution of training resources.
 - ❑ Training manuals
 - ❑ Videos
 - ❑ Facilitation guides
 - ❑ Train the Trainer
3. Keep all exams on file and distribute copies of exams to district when needed for testing.
4. Proctor examinations for non-INDOT technicians twice a year or on an individual basis.
5. Maintain a database of test results for both INDOT and non- INDOT technicians.
6. Prepare and distribute certificates to individuals who complete all requirements in the program.
7. Coordinate the course material, updates, exams and other relevant material with the Tech Panels.
8. Communicate the employee's status at the end training year to the District by identifying employees that are eligible for promotion and employees that do not meet program requirements.
9. Provide promotion list to Human Resources Division Compensation Section.